

MINI REMOTE THERMOMETER

MODEL: MTR101

USER'S MANUAL

INTRODUCTION

Congratulations on your purchasing the MTR101 Mini Remote Thermometer.

The basic package comes with a main unit and a remote sensor. The main unit can support up to three remote sensors.

The MTR101 is very easy to use. No wire installation is required between the main unit and the remote units. As the MTR101 operates at 433MHz, it can be used in the U.S. and most places in Continental Europe.

MAIN FEATURES

A. OUTDOOR TEMPERATURE

Shows the temperature of the selected remote channel

B. INDOOR TEMPERATURE

Shows the temperature taken indoors

C. [CHANNEL] BUTTON

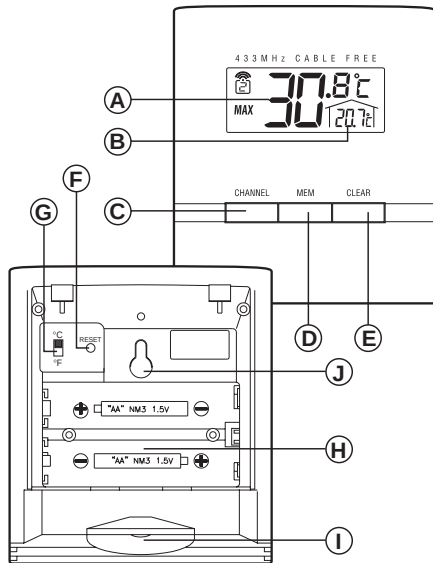
Selects among different channels

D. [MEM] BUTTON

Displays current, maximum and minimum temperatures

E. [CLEAR] BUTTON

Clears the memory for the indoor temperature and that for the selected channel



F. RESET BUTTON

Returns all settings to default values

G. °C/°F SLIDE SWITCH

Selects between degrees Centigrade (C) and Fahrenheit (F)

H. BATTERY COMPARTMENT

Accommodates two (2) UM-3 or “AA” size batteries

I. TABLE STAND

Rotates out to support the unit on a flat surface

J. WALL-MOUNT HOLE

For mounting the unit on a wall

MAIN FEATURES: REMOTE UNIT

A. LED INDICATOR

Flashes when the remote unit transmits a reading

B. CHANNEL SLIDE SWITCH

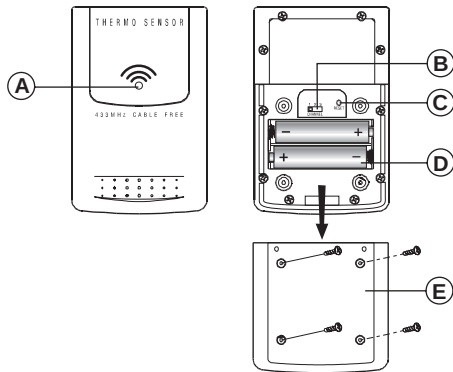
Designates the remote unit Channel 1, Channel 2 or Channel 3

C. RESET BUTTON

Returns all settings to default values

D. BATTERY COMPARTMENT

Accommodates two AAA-size batteries

E. BATTERY DOOR

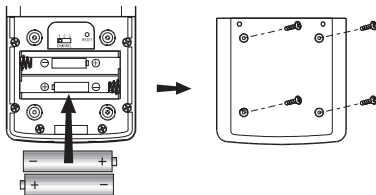
HINTS FOR BEST OPERATION

- Assign different channels to different remote units.
- Insert batteries for remote units before doing so for the main unit.
- Set the main and remote units within range (20 to 30 meters).

- Try different set-ups for best transmission and reception.
- Position the remote units away from direct sunlight, rain or snow.

BATTERY AND CHANNEL INSTALLATION: REMOTE UNIT

1. Remove the screws on the battery compartment.
2. Select the channel number on the CHANNEL slide switch.

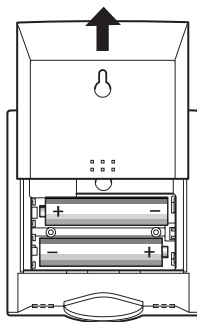


3. Install 2 alkaline batteries (UM-4 or “AAA” size 1.5V) strictly according to the polarities shown.
4. Replace the battery compartment door and secure its screws.

Note that once a channel is assigned to a remote unit, you can only change it by removing the batteries or resetting the unit.

BATTERY INSTALLATION: MAIN UNIT

1. Slide open the battery compartment door.
2. Insert two AA-sized batteries.



3. Press RESET.
4. Replace the battery compartment door.

GETTING STARTED

Once batteries are in place for the remote units, they will start transmitting samplings roughly at 30-second intervals.

The main unit will also start receiving once batteries are installed. The temperature of the selected channel will be displayed on the main display and the indoor temperature on the secondary display. The main unit will automatically update its readings at 30-second intervals.

If no signals are received, blanks will be displayed. Press CHANNEL and MEM simultaneously to enforce an immediate search. This is useful in synchronizing the transmission and reception of the remote and main units.

INDOOR AND OUTDOOR TEMPERATURES

The indoor temperature is shown on the secondary display.

As for the remote sites or channels, press CHANNEL repeatedly to go from one channel to another. The kinetic wave display on the channel number indicates the reception of that particular channel is in good order.

Kinetic-wave Icon			
Designated Display	Remote Display Channel One	Remote Display Channel Two	Remote Display Channel Three

To start an automatic scan on all channels, press and hold CHANNEL for two seconds. The main unit will scan from one channel to another and back. The reading for individual channel will be displayed for five seconds. Press any key to end the automatic scan.

The MTR101 is capable of measuring temperatures within the -50°C (-58°F) and +70°C (+158°F) range. If the temperature goes above or below that, the display will show "HHH" or "LLL".

MAXIMUM AND MINIMUM TEMPERATURES

The maximum and minimum recorded indoor temperatures and those of each channel will be automatically stored in memory.

To display them,

1. Press [CHANNEL] to locate the desired channel.
2. Press [MEM] repeatedly to display the current, maximum (MAX) and minimum (MIN) temperatures. The readings of the indoor temperatures will also be displayed.

To clear the memory of a particular channel,

1. Press **[CHANNEL]** to locate the desired channel.
2. Press **[CLEAR]**. Note it will also erase the memory for the indoor temperatures. If you press **MEM** now, the maximum and minimum temperatures will have the same values as the current ones until different readings are recorded.

DISCONNECTED SIGNALS

If without obvious reasons the display for a particular channel goes blank, press **[CHANNEL]** and **[MEM]** to enforce an immediate search. If that fails, check if the remote unit of that channel is still in place. Make sure the transmission is within range and path is clear of obstacles and interference. No reading will be shown if no remote unit is assigned to that channel.

LOW BATTERY WARNING

When it is time to replace batteries, the respective low-battery indicator will show up when the respective channel is selected. The battery level of the main unit will be shown on the indoor temperature when it is running low.

HOW TO USE THE TABLE STAND OR WALL MOUNTING

Turn the table stand knob out to place the main unit on a flat surface. Or you can hide the stand and mount the unit on a wall using the recessed hole.

As for the remote unit, use the provided Velcro[®] tape to secure it in place.

Main unit

Wall-mount

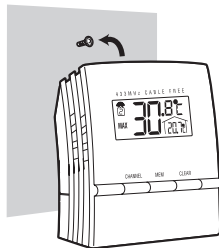
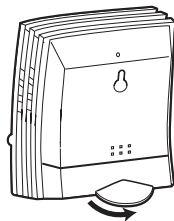
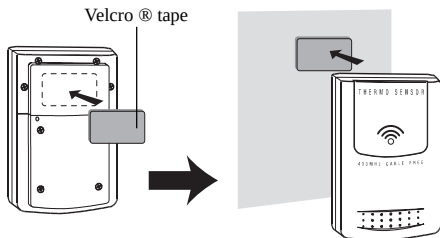


Table Stand



Remote unit

Wall-mount



THE RESET BUTTON

The **[RESET]** button is used to enhance synchronization of signals after battery replacement or when the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.

PRECAUTIONS

This unit is engineered to give you years of satisfactory service if handled carefully.

1. Do not immerse the unit in water.
2. Do not clean the unit with abrasive or corrosive materials.
3. Do not subject the unit to snow or excessive force, shock, dust, temperature or humidity.
4. Do not tamper with the unit's internal components.
5. Do not mix new and old batteries or batteries of different specifications

SPECIFICATIONS

Temperature Measurement

Main unit

Indoor Temperature measurement

Displayed IN temperature range	: -9.9°C to +70.0°C (14.2°F to 158.0°F)
Proposed operating range	: -5.0°C to +50.0°C (23.0°F to 122.0°F)
Temperature resolution	: 0.1°C (0.2°F)

Remote Temperature measurement

Displayed OUT temperature range	: -50.0°C to +70.0°C (-58.0°F to 158.0°F)
Proposed operating range	: -5.0°C to +50.0°C (23.0°F to 122.0°F)
Temperature resolution	: 0.1°C (0.2°F)

Remote unit

Displayed temperature	: -50.0°C to +70.0°C (-58.0°F to 158.0°F)
Proposed operating range	: -20.0°C to +60.0°C (-4.0°F to 140.0°F)
Temperature resolution	: 0.1°C (0.2°F)
RF Transmission Frequency	: 433 MHz
No. of Remote unit	: Maximum of 3
RF Transmission Range	: 30 meters (open area)
Temperature sensing cycle	: around 30 seconds

Power

Main unit	: use 2 pcs UM-3 or "AA" 1.5V alkaline battery
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Remote sensing unit	: use 2 pcs UM-4 or "AAA" 1.5V alkaline battery
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Weight

Main unit	: 76 gm (without battery)
Remote sensing unit	: 67 gm (without battery)

Dimension

Main unit	: 142(L) x 84(W) x 24.5(T) mm
Remote sensing unit	: 92(L) x 60(W) x 21(T) mm

NOTE ON COMPLIANCE

This product complies with standards and specifications of BZT, FCC and article number 334 of PTT.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can

radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
4. Consult the dealer of an experienced radio/TV technician for help.

CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The manufacturer and its suppliers held no responsibility to you or any other claim arising by using this product.
- The contents of this manual may not be reproduced without the permission of the manufacturer.